



## GLOBAL CLIMATE CHANGE

MAY 2006



*Primarily through protected area management, training and technical assistance, and vulnerability reduction and adaptation, USAID is succeeding in preserving the environmentally significant lands of Guatemala. At the same time, these efforts have addressed the issue of climate change by preserving carbon stocks and building the capacity of the Guatemalans to reduce greenhouse gas emissions.*

**Background.** Rich biodiversity, cultural diversity, and a historic past easily place Guatemala among one of the world's top tourism destinations. Efforts to conserve this diversity have been recognized by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the Ramsar Convention on Wetlands, and other international organizations and treaties. Guatemala's importance as a point of convergence of species migrating from both North and South America is vital for the conservation of many migratory bird species from the United States.

**Sector-Specific Climate Change Activities.** In recent years, USAID's environment program in Guatemala supported environmentally sound management of natural resources in priority areas of great biodiversity, including the Maya Biosphere Reserve in the Petén, the Motagua-Polochic system (which includes the Sierra de las Minas Biosphere Reserve), and the Atitlan Volcanoes Bioregion. The program also provided assistance to develop sustainable income-generation alternatives to people living in and around protected areas. These include efforts to establish certified timber production, encourage tourism, and promote environmentally sound production practices.

Specifically, efforts that support long-term ecosystem health and the conservation of carbon stocks include:

- Improving natural resource management for the conservation of biodiversity in selected bioregions;
- Providing incentives for sustainable land use and conservation through the development of sound environmental policies;
- Improving civil society's analysis of and ability to address environmental policy issues; and
- Strengthening institutions responsible for natural resource use and conservation of biodiversity, including the central government, municipalities, and local grassroots organizations.

*Addressing Climate Change through Natural Resources Management and Conservation of Carbon Stocks.* USAID/Guatemala assistance has supported the preparation of the Master Plan for Sierra Lacandón National Park; staff training on fire management; fire breaks; and regular patrolling of the park. However, problems with encroachment have increased due to lack of institutional capacity and resources to enforce regulations and address underlying land tenure problems in the region.

In Atitlán, tourism infrastructure was installed for San Pedro and Santa Clara Municipal parks and staff was trained in municipal parks administration. The San Pedro Municipal Park developed operating and financial plans, defined a co-management structure that includes local government authorities, nongovernmental organizations and civil society organizations. With the financial resources leveraged from other sources, trails, a visitor center, and a geology museum were also constructed. In Santa Clara, two park guards and a park director were hired by the municipality. In San Marcos and San Juan municipalities, park boundaries have been mapped and delimited and best management practices for sustainable land use have been developed. All these elements served as inputs to management plans. In the Motagua-Polochic bioregion, the 2003-2007 Management Plans for Sierra de las Minas and Bocas del Polochic were approved by the National Council of Protected Areas (CONAP). The Conservation Plan for Monte Espinoso area was developed and presented for consultation to new mayors, and private owners to municipal and private reserves. Agreements were signed with 11 municipalities that included the payment of the salary of one park guard per municipality.

*Policy Reform.* With USAID/Guatemala support, key policy reforms in the areas of improved forest management and conservation were developed, which led to the implementation of the Human Settlement in Protected Areas Policy by CONAP. The policy established guidelines and conditions for the Government of Guatemala to negotiate the resettlement of communities located within protected areas and defined allowable land-uses within the Maya Biosphere Reserve (Petén).

In the Verapaces, an agreement was signed with CONAP, Fondo de Tierras, the Guatemalan land conflict resolution commission (CONTIERRA) and Defensores de la Naturaleza to address agrarian issues, as they relate to protected areas. The Forest Management and Non-timber Products Policies have been key in managing forestry activities, e.g., the enforcement of CITES<sup>1</sup> regulations for mahogany, the development of regulations, procedures, and guidelines for “xate” (ornamental palm) management activities inside parks,

---

<sup>1</sup> CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

**USAID's partners in climate change activities in Guatemala include\*:**

- Defensores de la Naturaleza
- Chemonics International, Inc.
- International Resources Group (IRG)
- ProPeten
- The Nature Conservancy (TNC)
- Wildlife Conservation Society (WCS)
- U.S. Department of the Interior

\* Because partners change as new activities arise, this list of partners is not comprehensive.

the development and implementation of park management plans, and to support user rights and assure compliance of responsibilities in forestry concessions. Additionally, the participatory processes used for policy formulation have generated a learning process and experience for the organizations and individuals involved, strengthening their capacity in policy formulation, as well as raising awareness among the settlers in Petén of the link between natural resources management and sustained livelihoods.

As of 2004, \$158,746 was leveraged for Sierra Lacandon National Park (Petén) from different sources to work with communities, resolve land tenure issues, and for planning and monitoring activities. Additionally, funds were leveraged by Wildlife Conservation Society for park and wildlife management in the Petén area, specifically for the Multiple Use Zone and the Laguna del Tigre National Park.

The Nature Conservancy under the PIP program provided \$280,396 as matching funds to support the Atitlan and Motagua Polochic areas.

*Capacity Building.* In addition, technical support was provided to CONAP in the formulation of the Policy for Mining and Oil Activities in Protected Areas, and to the Ministry of Environment and Natural Resources (MARN), Ministry of Agriculture (MAGA) and the General Secretariat of Planning (SEGEPLAN) in the formulation of the National Water Policy. To respond to multiple requests from the Government of Guatemala, USAID/Guatemala also provided technical support to the Government of Guatemala in their efforts to initiate the development of the Rural Development Policy and Strategy. This has been an excellent opportunity to establish the linkages between economic growth and environment.

Over the years, training activities and technical assistance were provided for forestry management activities, fire prevention and control, environmental education, geographical information systems (GIS), park management, and gender issues. More than 50 events were carried out in a single year.

*Forest Fire Prevention and Control.* Reducing forest fires and forest fire threats is a key focus of USAID/Guatemala's assistance in the Maya Biosphere Reserve where in 2005, 375,000 hectares (nearly 1/5 of the reserve) burned during the fire season. USAID support has equipped and trained municipal fire brigades in all seven municipalities of the region, and Defensores de La

Naturaleza (the organization co-managing the area) is actively engaged in fire prevention establishing fire breaks, conducting prescribed burns, and establishing voluntary brigades to conduct patrols and monitoring activities. In addition, in collaboration with the U.S. Department of the Interior, USAID is helping to improve national response, coordination, and technical capacity to prevent and respond to forest fires, thus helping conserve biodiversity and reduce greenhouse gas emissions.

For more information on Guatemala, visit  
USAID's Web site at:

**<http://www.usaid.gov/gt>**